UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1450

P O Box 1450 Alexandria, Virgima 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 02/20/2008

Gordon E Nelson 57 Central St PO Box 782 Rowley, MA 01969 EXAMINER
KINKEAD, ARNOLD M

ARTUNIT PAPER NUMBER
2817
DATE MAILED: 0220/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/579,949	05/22/2006	Adam Laiacano	KENCO01.010	9274		
TITLE OF INVENTION; OPTICALLY EXCITED ATOMIC FREQUENCY STANDARD						

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEES) DUE
 DATE DUE

 nonprovisional
 YES
 \$720
 \$300
 \$0
 \$1020
 052002008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth tions	ng the Patent, advance of nerwise in Block 1, by	orders and notification (a) specifying a new o	of m	naintenance fees wil pondence address; a	II be and/or	mailed to the current (b) indicating a sepa	com	espondence address as "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
Gordon E Nels 57 Central St PO Box 782	on	v2008		I her State addre trans	Certi reby certify that this is Postal Service wire essed to the Mail : mitted to the USPT	ficate Fee(: th suf Stop O (57	of Mailing or Transa) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the da	miss dep t cla abor ate in	ion osited with the United ss mail in an envelope e, or being facsimile dicated below.
Rowley, MA 01	969								(Depositor's name)
				⊢					(Signature)
				L_					(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	C	ONFIRMATION NO.
10/579,949 TITLE OF INVENTION	05/22/2006 F: OPTICALLY EXCITE	ED ATOMIC FREQUEN	Adam Laiacano CCY STANDARD			1	ŒNCO01.010		9274
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	Т	DATE DUE
nonprovisional	YES	\$720	\$300		\$0		\$1020		05/20/2008
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]				
KINKEAD,	ARNOLD M	2817	331-094100	_					
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA less an assignce is ident h in 37 CFR 3.11. Comp	inge of Correspondence "Indication form acd. Use of a Customer	(I) the names of u or agents OR, alter (2) the name of a segistered attorney 2 registered patent listed, no name will THE PATENT (print of the content of the patent of th	ip to native single or a attor il be p or typ he pa	e firm (having as a r gent) and the names meys or agents. If no printed. e) tent. If an assigned assignment.	memb s of u o nam	er a 2o to e is 3	œun	nent has been filed for
Please check the appropr	iate assignee category or	categories (will not be p	orinted on the patent):	۵	Individual 🚨 Cor	porati	on or other private gro	oup e	ntity 🗖 Government
4a. The following fee(s) Issue Fee Publication Fee (N Advance Order	vo small entity discount p		b. Payment of Fee(s): (A check is enclos Payment by credi The Director is he overpayment, to I	ed. t care	i. Form PTO-2038	is atta	ched.	ficie	
	s SMALL ENTITY state	as. See 37 CFR I.27.					TITY status. See 37 CE		
NOTE: The Issue Fee an interest as shown by the	records of the United Sta	ites Patent and Trademar	k Office.	11	arracum, a regist				or outer party in
Authorized Signature			Date						
Typed or printed name					Registration No				
This collection of inform an application. Confiden submitting the completes this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	nation is required by 37 C tiality is governed by 35 d application form to the ions for reducing this but 'irginia 22313-1450. DC it3-1450.	CFR 1.311. The informat U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to to D NOT SEND FEES OR	on is required to obtain 1.14. This collection in y depending upon the he Chief Information O COMPLETED FORM	or re s esti indivi ffice S TC	etain a benefit by the imated to take 12 m idual case. Any con r, U.S. Patent and T D THIS ADDRESS.	e publ inutes nment 'raden SENI	ic which is to file (and to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner I	l by g ga ne y artm for P	the USPTO to process) thering, preparing, and ou require to complete ent of Commerce, P.O. atents, P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

COMMISSIONER FOR PATENTS P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/579,949	05/22/2006	Adam Laiacano	KENCO01.010	9274	
75	90 02/20/2008		EXAM	UNER	
Gordon E Nelson			KINKEAD, ARNOLD M		
57 Central St			ART UNIT	PAPER NUMBER	
PO Box 782 Rowley, MA 01969			2817 DATE MAIL ED: 02/20/200	8	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 29 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 29 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)
10/579,949	LAIACANO ET AL.
Examiner	Art Unit
Arnold Kinkead	2817

— The MALING DATE of this communication appears on All claims being allowable, PROSECUTION ON THE MERTS IS (OR REherevith (or previously mailed), a Notice of Allowance (PTOL-85) or othe NOTICE OF ALLOWABILITY IS NOT, A GRANT OF PATENT RIGHT. Of the Office or upon petition by the applicant. See 57 CFR 1.313 and MIN	MAINS) CLOSED in this application. If not included r appropriate communication will be mailed in due course. THIS This application is subject to withdrawal from issue at the initia
 This communication is responsive to <u>01-22-08</u>. 	
 The allowed claim(s) is/are <u>1-3,7,8 and 10-12</u>. 	
3.	sectived. seeked in Application No shave been received in this national stage application from the ommunication to file a reply complying with the requirements this application. See the attached EXAMINER'S AMENDMENT or NOTICE OF (s) why the oath or declaration is deficient. Somitted. See the attached EXAMINER'S AMENDMENT or NOTICE OF (s) why the oath or declaration is deficient. Somitted. See the attached EXAMINER'S AMENDMENT or NOTICE OF (not) why the oath or declaration or deficient. Somitted. Somet / Comment or in the Office action of the oath of or according to 37 CFR 1.121(d). SOLOGICAL MATERIAL must be submitted. Note the
Attachment(s) 1. Notice of References Cited (PTO-892) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) 3. Information Disclosure Statements (PTO/SB/08),	5. Notice of Informal Patent Application 6. Interview Summary (PTC-413), Paper No./Mail Date 7. Examiner's Amendment/Comment 8. Examiner's Statement of Reasons for Allowance 9. Other

Primary Examiner, Art Unit 2817

Application/Control Number: 10/579,949

Art Unit: 2817

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Please resubmit an abstract on a separate paper.

On page 2, line 28 of the specification, the first two words have been corrupted, --frequency separation—should be how the text reads.

Please send in a replacement page. A replacement specification would be helpful to eliminate any PCT identifiers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnold Kinkead whose telephone number is 571-272-1763. The examiner can normally be reached on M-Th(8:00am - 6: 30pm). The examiner is working from a remote work site. Please allow one business day for return calls. Voicemail is checked daily(unless on vacation).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/579,949 Page 3

Art Unit: 2817

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Arnold Kinkead/ Primary Examiner, Art Unit 2817